

ner of an articular extremity, the exostoses were not situated *within* the joints as in the case of Volkman, Virchow first described these exostoses, and ranked them among the rarer variety. The large operative material of Volkmann, however, would tend to prove that the "exostosis cartilaginea" is the most common variety of *exostoses*. Volkmann has suggested to rank only those exostoses covered with cartilage among the tumors in the stricter sense of the definition. For bony outgrowths not covered by cartilage seem to the clinician at least rather a result of inflammatory processes, rather osteophytes in their nature, a typical, well defined, new bony growth of periosteal development. According to the theories of the author the exostosis has its origin in a trauma inflicted on the epiphysis of the growing bone. No inflammation results, but a simple dislocation of cartilage cells out of their normal longitudinal arrangement as seen in the epiphysis of a developing bone. These cells simply turned from the longitudinal to the transverse diameter of the bone continue to grow, but in an abnormal manner (outwards from the epiphysis). We have thus resulting a cartilaginous outgrowth later ossifying into an exostosis covered with cartilage, contemporary with the growing bone. In Volkmann's intra-articular growth this mode of origin from the articular end of the bone seems simplest to the author. *Zeitsch. f. chir.*, Bd xxvi, heft 1 and 2.

II. The Phelps' Method of Treating Club-Foot. By A. PHILLIPSON, M. D. (Hamburg). The author gives a concise description of the Phelps method of operation for club-foot deformities. The division of cases by Phelps is closely adhered to—(a) those cases which are easily corrected, (b) where tendon and fasciæ are contracted, (c) where all the tissues are contracted, tendons, fasciæ, muscles. In the first set of cases simple means by which the foot is placed in normal position, splint, massage, electricity, suffice. In the second class the tendo Achillis and plantar fascia are divided, and where necessary the tendon of the tibialis posticus is divided from the internal malleolus: at the same time the deltoid ligament is divided completely by a circular incision passing close to the border of the internal malleolus. The

scaphoid is thus brought to a normal position with the astragalus and the calcaneus can be replaced also. The foot is then fixed with splint in normal position. In the third class the Achilles tendon is divided subcutaneously, but to this is added an open incision, extending from a line joining the inferior border of the int. malleolus to Chopart's articulation, perpendicularly 3 or 4 cm. toward the plantar surface of the foot. The tibialis posticus, the lateral ligament, flexor longus digitorum, the abductor hallucis, flexor hall. long. are according to necessity divided. Plantar fascia and flex. brev. are divided if offering any resistance, the foot being strongly redressed at intervals during the operation. After operation plaster bandage is applied until the wounds have healed. Then the elastic apparatus of Phelps can be used to keep the foot in good position. In paralytic club-foot belonging to the third class, carry the above elastic apparatus permanently. In the Hamburg general hospital the wound after the operation is covered lightly with protective, then sublimate gauze dressing, and this is covered with turf moss cushion, and finally plaster bandage. After four weeks this is removed, and a removable plaster and water-glass bandage put on for six to twelve weeks. This last splint reaches to the knee, and the patient is able to walk in it. The patient is then fitted with the removable plaster boot of Dr. Hausmann. (*Archiv. f. klin. Chir.*, Bd. 32, s. 989.) *Deutsche Zeitsch. f. Chir.* Bd. xxv. heft. 3.

HENRY KOPLIK (New York)

III. Osteotomy, a Radical Cure for Hammer-Toe. Dr. EUGÈNE COHEN (Paris).—In this affection the toe is continually in a state of extension on the metacarpal bone, the interphalangeal joint is extremely flexed, and the last or small phalanx is either bent under the toe or points forwards. The skin becomes so irritated that a bunion is soon developed, and inflammation is often so bad that the toe has to be amputated. M. Terrier was the first to practice excision of the joint. A large circular flap, including the bursa, is cut over the joint which is then opened. The extensor tendon with its sheath is cut through, as are also the two lateral ligaments. The two articular sur-